Florida Department of Transportation Mobility Performance Measures Team April 9-10, 2013 Meeting Summary

The Mobility Performance Measures Team (MPMT) met in Orlando Florida at the FDOT District 5 Urban Office on April 9 and 10.

In attendance were:

John Taylor, David Lee, Brian Watts, Doug McLeod, Erik Treudt – FDOT CO Waddah Farah – FDOT D7
Jim Green – FDOT D2
John Moore – FDOT D5
Greg Slay, John Voges – Ocala/Marion TPO
Beth Alden – Hillsborough MPO
Mike Escalante – Gainesville MPO
Gary Kramer – FL, AL, OW, Bay County TPO
Tyrone Scorsone, Anita Vandervalk – CS
Li Jin – KAI
Todd Davis – GMB
Bob Wallace – Tindale-Oliver

Participating remotely:

Leann Jacobs - FHWA

Eric Brickner, Bryan Paulk, Diane Quigley - FDOT CO

Larry Hymowitz, Melissa Ackert, Shi Chiang Li, Min Tang, Lois Bush - FDOT D4

Jessica Josselyn - KAI

Buffy Sanders, Broward MPO

Kim Samson - FDOT TPK

Ken Jeffries, Rax Jung, Lisa Gonzalez, Raymond Freeman - FDOT D6

The meeting was called to order on April 9 at 1:30 p.m. by Doug McLeod.

Doug McLeod presented material regarding meeting objectives, introduction to mobility performance measures, and statewide MPM efforts.

The following items were discussed:

1. The Mobility Performance Measures (MPM) Team needs to recognize the importance of economic and safety measures; however, the meeting's focus is mobility measures. A request was made to include financing in the evaluation of the measures; the respondent indicated a need for data to do so. Lois Bush (D4) asked about building a connection to the DEO Strategic Plan or the FDOT Trade and Logistics Study. The MPMT could begin gathering safety and economic measures but this is outside the MPMT's role. In the future invitations will be extended to staff from the Safety Office and those working on economic measures.

- 2. The MPMT should further examine which performance measures MPOs need to address. In the context of long range planning, how do performance measures fit into existing processes and what will MPOs need to calculate and report in the future? What will MPOs be evaluated on? Dave Lee of Policy Planning said we need to be aware of how national goals fit with measures at the state and MPO levels. This is an ongoing process that will be changing. For now, look at what makes sense to stay ahead of the game.
- 3. There was discussion about looking at things we can control. John (D5) expressed an interest in measures that provide meaning to existing goals. John Taylor from Transportation Statistics differentiated data needs from data wants. He said the state typically focuses on wants and not needs, he intends to use the MPM program to refocus on needs.
- 4. Performance measures such as congestion, delay, and travel time reliability were defined. As the definitions were presented, there was agreement on the definitions of congestion, heavy congestion and severe congestion. Doug McLeod says speed and delay are results of congestion. He reported on the new level of service (LOS) standards and said it may be easier for entities to understand LOS when presented in terms of average travel speeds. Mike Escalante (Gainesville) has an issue with the new standards as applied to large urbanized areas; he believes they are too tough and expects local governments will make exceptions. Given time constraints, additional discussion on delay, travel time reliability and travel time variability will be done in a future webinar.
- 5. Representing the Aviation Office, Erik Treudt talked about the Air Connectivity Index created by the World Bank and said it could serve as an accessibility measure. Mike Escalante asked about clearance time including time from checking in until departure. Treudt said it is an airline measure.
- 6. Mike Williamson of Cambridge Systematics reported on behalf of the Seaport Office that has identified needs by linking analysis of channels, births, and railroad connections. He has finished a gap analysis identifying where additional measures are needed. The Seaport Office is seeking water based performance measures. Will there be measures of interaction between the modes? The examples provided were transit and sidewalks or freight break bulk points, e.g. ship to rail.
- 7. Larry Hymowitz (D4) says for automobiles travel time reliability is important but for bikes and pedestrian safety is more important. He said if we are addressing all modes, we should think more broadly to address all modes. John Taylor (TranStat) said we do not exclude these measures; we allow the offices responsible for them to report on them. Doug McLeod emphasized these are for statewide reporting.
- 8. Dave Lee commented that the measures are hierarchal and comprehensive and many measures go together. John Taylor talked about safety and preservation being separate, but related. We need to choose which measures to focus on; the Department has a performance measures report and mobility is a subset. Dave said there is a new performance based planning and programming graphic figure that shows the context for the measures and provides consistent definitions.

- 9. Mike Escalante says travel time reliability is more than just mobility, and asked should a component of safety be built into the measure? He disagreed with the way the measure is calculated because it does not represent the whole trip. Mike asked for context sensitive performance measures like intra urban versus inter-urban.
- 10. There is a lack of education on how measures are calculated; there is a need for training. It is helpful to present what the letter grades really mean e.g. report travel speed.
- 11. Nonrecurring congestion accounts for 40-50% of all congestion. Where do we start our calculation of delay, at free flow speed or an LOS based speed? Escalante said we should consider the length of the facility when evaluating speed. Todd Davis of GMB responded we have to look at the whole facility including signalized intersections. The Greg Slay (Ocala) says we should consider the area type when determining peak period. Doug said the peak period used in the calculations aligns with the peak period in the large metropolitan areas. Slay says robust data will be available to replace models that generate speeds.
- 12. FHWA promotes performance based planning for our internal use to evaluate our system and help prioritize projects. How will reporting on measures be separated from funding allocation, will poorer conditions support additional funding? LeeAnn Jacobs from FHWA says there has been no mention of using the measures for funding allocation. Dave Lee says states are slightly concerned a comparison will occur. He says all would benefit from simplifying the structure and reducing program categories.
- 13. Transportation Statistics Office's (TranStat) Source Book comes to the forefront as the major resource for all to calculate performance measures. Funds are tight but FDOT management sees the value of the MPM Program and has funded it well. There is a push to make Florida first to report on MAP-21 measures and mold definitions like delay and travel time reliability. TranStat can disaggregate the measures and report them for Districts and MPOs. Each mode will likely have measures beyond those reported by TranStat. TranStat's website should be the primary source for information related to mobility performance measures in Florida.
- 14. Doug suggested that the TranStat's role expand from highways and under John's leadership capture statistics for all modes. Beth Alden (Hillsborough) asked about including an ITS infrastructure coverage measure, lane miles per capita, and including transit headways. A potential ITS performance measure is lanes miles per capita. Beth continued to ask about transit measures for percent coverage and duration of service. Diane Quigley of the Transit Office responded there is not enough staff in FDOT to track that for 29 transit agencies. Separately, transit geographic coverage area and conditions of stops were proposed as transit measures. It was suggested that TBEST is a better tool for measuring accessibility; it contains a geographic locator for all transit stops. Doug inquired about building a 3-person transit team to further assess the feasibility of these measures. Quigley declined and proposed sticking to the transit measures that were already presented. The alternative measures can be gathered and reported at the local level.

- 15. How does the MPMT capture truck measures when they operate at different times of the day? Escalante asked about capturing tonnage for all freight including smaller vehicles off loading freight within the right of way. Florida's biggest export is empty trucks. What is the definition of a truck? Statewide the initial intent was to capture truck classification 8 and higher. Brenda Young of District 5 asked about other options to move freight and goods; she asked are there other freight and modal measures. Treudt asked if there are many freight measures in MAP-21? Slay said we would eventually get there but for now we should focus on the highway. Kim Samson of the Turnpike said it would be difficult to account for freight travel time reliability; how are we differentiating it from automobile reliability. Trucks do not travel in the peak hour.
- 16. The MPOs said they do not create comp plans; local governments do the projects and are responsible for the funding. There needs to be a connection between local governments and MPOs in setting targets. In other FHWA program areas if you don't reach your target you have to reallocate funding from another area to address the inadequacies. Jacobs said this might be the case for programmatic funding. FDOT can report for the whole state including the MPOs. Slay asked what to do when Ocala's performance goals for a facility differ from a neighboring jurisdictions performance goals for the same facility? Will the state set the goals for the SIS and the MPO's for the non-SIS? Will FDOT set the performance goals for I-75?
- 17. Doug suggested not reporting on the individual district level and shared the current reporting categorization is by seven largest counties. Will Central Office (C.O.) cobble together district reports or reports statewide? Bush said another reporting unit could be groups of MPOs in a region. Doug predicts future reporting will be within FHWA urbanized boundaries and not planning areas
- 18. Alden asked about available data for the arterial system, alluding to there being insufficient data. What about the data on parts of the NHS that are not on the SHS? Taylor says Traffic Operations will buy data and he expects them to share it with other offices, recognizing the need to analyze it. The data must undergo preparation before it can be used, i.e. because it is in minuscule bins it needs to be aggregated. Anita Vandervalk (CS) talked about FHWA buying data for public agency consumption.
- 19. Waddah Farrah of District 7 asked if MPMT would have access to RITIS. He wants to extract data for safety and TSM&O improvements using I-75 as an example. He and Kris Milster of FHWA did a test on the data and the results did not come out the way they expected; Farah now has concerns. The data needs to be sorted to be used and the effort to sort the data will be significant. It was suggested an analyst could acquire data for smaller projects first, making the magnitude of the data more manageable and affordable.
- 20. Escalante asked about gaming targets to reflect roadway needs. The MPOs might set performance targets separate from FDOT. Alden asked how would the targets affect the cost feasible plan? Her agency does not want to see needs without evidence that they can be built. More questions arose about consolidating reporting and having consistent goals.

- 21. Vandervalk talked about planning for operations and transportation systems management and operations (TSM&O). The Ocala MPO's big projects are operational. MPOs are moving more towards TSM&O, there was further discussion on the need to have measures that capture operational improvements. With resources trending downward, operational improvements are preferred because they provide a greater return on investment. Mellisa Ackert of District 4 asked about performance measures for arterials that could be useful by operations personnel. She suggested ideas of schedule adherence and travel time reliability on a smaller scale. Measures the MPMT select should be sensitive to maintenance and operations improvements to account for the cost benefits of maintenance and operational projects.
- 22. Attendees asked if the measures for MAP-21 could be reported in its own table. There were requests for multiple tables to assist in identifying the suggested measures. Taylor says we could layer the performance measures focusing on statewide measures first that get vehicles to and thru urban areas. As a reviewer drills down the measures would become more specific depending on the area.
- 23. Quigley asked if the measures being proposed are going to be in FHWA's rules or guidelines. Doug is convinced that delay and travel time reliability will be required.
- 24. Questions about the size of the network arose. Slay asked for performance measures on connectors to airport, seaports, and rail yards. Escalante requested FDOT expand performance reporting to systems aside from the SHS. Are MPOs responsible for their network outside of the SHS? Farah said there might not be data on sections of the connectors that are local roads. Taylor said focus on the SIS, most connectors are included in the SHS except for the few on the NHS. Taylor said TranStat is looking at the differences between SIS and NHS connectors and considering consolidating SIS and NHS connectors. Team members could see the NHS network on the TranStat website. When asked what the MPOs will report, FHWA responded it depends on the target.
- 25. Flexing highway funds to transit is an example of a practice that needs to be explained in the narrative of the MPM reports. This explanation assists in the justification of poor highway performance. Ship to rail direct connections are overlooked too by the proposed measures and should be mentioned in the narrative.
- 26. Young talked about District 5's TSM&O program and stated it was autocentric. She introduced Courtney Miller their commuter assistance consultant. They track what employers are doing to get people out of single occupancy vehicles. They have many programs to promote ridesharing, flexible work schedules, and telecommuting. Only reporting on auto data will drive funds to auto projects. The various ridesharing programs are reporting different measures including Central Office; Miller sees the value in one reporting criteria. They have started obtaining qualitative data on ride matching. Measuring commuter assistance accounts for the number of vehicles being removed from the traffic stream. Vandervalk suggests a District 5 case study to explore commuter assistance as an accessibility measure. Taylor said there is no need to report this to FHWA, instead gather the information and report it statewide. The commuter services program agrees to be responsive and share information on the effectiveness of their program.

- 27. For MAP-21 measures, FDOT was tasked with listing the performance measures they will provide along with data resources to the MPOs. Doug repeated that the Department could provide MAP-21 measures on the MPO's behalf. There was concern about comparisons that would be made between Districts and between MPOs. Doug said it is not FDOT's intent to compare. A request was made to publish the performance measures reported by C.O. on behalf of the MPOs and Districts. The MPOs and Districts want them to review them. Taylor talked about creating a central repository for this purpose and creating a link on the website to hold on the measures. There is not a single place where all the studies are located but there will be one within the TranStat website. He went on to say we should create the data to generate the performance measures the MPOs want to use. We need consistency, compatibility, and coordination across the MPOs.
- 28. The South Florida Districts do not believe the measures being reported accurately capture the severity of congestion in their area. Central Office reports a 70% uncongested figure and that is too high in their assessment. The overall District role in reporting mobility performance measures is unclear.
- 29. Alden said the measures are okay but questioned how they could apply the measures. Vandervalk suggested FDOT look at SHRP2 travel time reliability implementation, specifically L05 application in Hillsborough County. She talked through taking data analysis out of silos and using it in project development and to support funding. She wants to further integrate data and performance based planning. A brief discussion on upcoming reliability efforts followed focusing on Districts 4 and 6. FDOT plans to initiate reliability studies there because of Mohammad Hadi's (Florida International University) presence in South Florida. There was a request for a "one pager" on what SHRP 2 is as it relates to reliability products.
- 30. Other passing questions were What about measures evaluating Florida's mobility during a hurricane evacuation? Should we go beyond tonnage and reporting on the frequency of trains? A commuter rail measure will not focus on tonnage; what about measures for Sun Rail?

Summary of Performance Measures Issues to be discussed/resolved with Team

- 1. General agreement on how FDOT and the MPMT is approaching the topic
- 2. General agreement on the draft mobility performance measures
- 3. Typical PM challenges control? Goals?
- 4. Reporting level how detailed? Segmentation? Arterials? Freeways? SHS?
- 5. Data needs versus data wants
- 6. Interaction/connection between modes data? Measures?

7. Targets – Who sets them? What about control? (such as land use and funding) What about overlapping areas (SIS/Non SIS)?

Action Items

- 1. Send notes and PPT material to all invited participants
- 2. In the future invitations will be extended to staff from the Safety Office and those working on economic measures possibly have Joe Santos present on Safety measures
- 3. Webinar on calculating delay and travel time reliability In 2-3 months
- 4. Next face to face meeting In 6-9 months
- 5. Create three tables:
 - a. MAP-21 measures
 - b. Statewide measures
 - c. MPO measures
- 6. Define roadway network the MPO's will be responsible for reporting on (urbanized versus planning boundaries)
- 7. Conduct a case study in District 5 to using commuter assistance as an accessibility measure
- 8. Create a central repository/website/metadata list identifying all the data needed to generate the performance measures
- 9. Publish the performance measures on the Internet for review by the MPOs
- 10. Assess SHRP2 L05 implementation and application in Hillsborough County
- 11. Develop a "one pager" describing SHRP 2 is as it relates to reliability products
- 12. Better define District's role in MAP 21
- 13. Keep Team up to date on real time data purchases